

ment as shown in FIG. 5 may include an outer band having a fixed length, a sensor 530 positioned on an inner side of the outer band, and an air injector 520 positioned between the outer band and the sensor 530. In operation S130, the adherency controller may inject air into the air injector 520. Accordingly, when the sensor 530 is activated, the adherency controller may adhere the sensor 530 to the body inside the outer band.

[0037] Alternatively, referring to FIG. 6, FIG. 6 is a diagram conceptually illustrating a structure of the adherency controller according to another exemplary embodiment. The adherency controller according to an exemplary embodiment as shown in FIG. 6 may include a sensor receptor 620 receiving therein a sensor 610 that is in an inactivated state. When the sensor 610 is determined to be activated in operation S120 of FIG. 1, the wearable device may accordingly control the adherency controller to thereby protrude the sensor 610 to the outside of the sensor receptor 620.

[0038] In addition, according to another exemplary embodiment, the wearable device may be smart glasses. In this case, the wearable device may include a frame constituting a body of the glasses and temples for supporting the glasses. Here, the adherency controller may include a hinge for connecting the frame for the glasses to each of the temples. Here, the hinge may control an angle between the frame and each of the temples. To control adherency in operation S130, the adherency controller may increase or decrease an angle between the frame and each of the temples.

[0039] In addition, according to an exemplary embodiment, the wearable device store a first state of the adherency controller and a second state of the adherency controller, wherein the first state refers to a state of which the sensor is inactivated and the second state refers to a state of which the sensor is activated. Afterwards, when the sensor is determined to be inactivated in operation S120, the wearable device may have the adherency controller in the first state. In addition, when the sensor is determined to be activated in operation S120, the wearable device may have the adherency controller in the second state. Such the first and second states may be considered as factors that determine adherency between the sensor and the wearer's body. For example, the first and second states may each correspond to a different length of the band. The first state or the second state may be set by a user. As the user differently sets the first state or the second state, the wearable device may control the adherency controller to be in appropriate contact with the body of the user wearing the wearable device.

[0040] When the adherency between the sensor and the body of the user wearing the wearable device is adjusted in operation S130, the wearable device may detect a biosignal through the sensor adhered to the body of the user wearing the wearable device (operation S140). The wearable device may obtain information according to types of the sensor.

[0041] FIG. 2 is a block diagram illustrating a structure of a wearable device 200 according to an exemplary embodiment. FIG. 2 is provided to represent one exemplary embodiment of the present invention, and the wearable device 200 according to an exemplary embodiment may include more components than those shown in FIG. 2. In addition, the components shown in FIG. 2 may be replaced with similar components.

[0042] The wearable device 200 according to an exemplary embodiment may include a sensor 210, an adherency controller 220, and a controller 230.

[0043] The sensor 210 may detect a biosignal from a body of a wearer wearing the wearable device 200. For example, the wearable device 200 may include at least one of an EMG sensor, an electrodermal activity sensor, a skin thermometer, a blood volume pulse (BVP) measuring device, an electrocardiogram (ECG) sensor, a respiration sensor, a blood pressure measuring device, and a heart rate measuring device. The EMG sensor means a sensor for detecting an action potential of muscles. The electrodermal activity sensor means a sensor for measuring the conductivity of the skin. The skin thermometer may include a sensor for sensing the temperature of the skin surface. The BVP measuring device means a device for measuring a volume of blood flowing in a blood vessel. The ECG sensor is a sensor for detecting a heart rate-related electric potential on a surface of the body. The respiration sensor is a sensor for measuring quantity and frequency of breathing. The heart rate measuring device indicates the number of the heartbeats during unit time.

[0044] The adherency controller 220 may adjust adherency between the sensor and the wearer's body according to the control of the controller 230. According to an exemplary embodiment, the wearable device may include a band which is wearable on the body of the user. The adherency controller 220 may lengthen or shorten the band included in the wearable device 200. For example, the band included in the wearable device 200 may include a shape-memory alloy. In this case, the adherency controller 220 can adjust a length of the band by contraction and expansion of the shape-memory alloy.

[0045] Alternatively, referring to FIG. 5, FIG. 5 is a diagram conceptually illustrating a structure of the adherency controller 220 according to an exemplary embodiment. The adherency controller 220 according to an exemplary embodiment as shown in FIG. 5 may include the outer band having a fixed length, the sensor 530 positioned on an inner side of the outer band, and the air injector 520 positioned between the outer band and the sensor 530. According to the control of the controller 230, the adherency controller 220 may inject air into the air injector 520. Accordingly, when the sensor 530 is activated, the adherency controller 220 may adhere the sensor 530 to the body inside the outer band.

[0046] Alternatively, referring to FIG. 6, FIG. 6 is a diagram conceptually illustrating a structure of the adherency controller 220 according to another exemplary embodiment. The adherency controller 220 according to an exemplary embodiment as shown in FIG. 6 may include the sensor receptor 620 receiving therein the sensor 610 that is in an inactivated state. When the sensor 610 is determined to be activated in operation S120 of FIG. 1, the adherency controller 220 may be controlled according to the control of the controller 230 to thereby protrude the sensor 610 to the outside of the sensor receptor 620.

[0047] In addition, according to another exemplary embodiment, the wearable device 200 may be smart glasses. In this case, the wearable device 200 may include a frame constituting the body of the glasses and temples for supporting the glasses. Here, the adherency controller 220 may include a hinge for connecting the frame a pair of the glasses to each of the temples. Here, the hinge may control an angle between the frame and each of the temples. To control